

# SCE18110303-48 DATA SHEET

# Low Loss TNC Male to TNC Male Cable LL142 Coax in 48 Inch with LF Solder

The TNC male to TNC male 48 inch cable using LL142 coax, part number SCE18110303-48, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LL142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The SCE18110303-48 TNC male to TNC male cable assembly operates to 18 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 95 dB. Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The SCE18110303 cable assemblies use durable stainless steel connectors and an FEP jacket. The connector/cable interface has double heat-shrink booting which provides added strain relief while increasing the durability of the cable assembly. The low attenuation per foot in a 0.195 inch diameter cable creates a cable that has good flexibility while offering industry leading loss characteristics. All SCE18110303 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

#### **Electrical Specifications**

Description	Min	Тур	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

## Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.82	0.98	1.22	1.58	2.02	dB
Insertion Loss (Typ.)	0.7	0.82	1.06	1.34	1.74	dB

## **Mechanical Specifications**

#### Cable Assembly Length\*

Weight

**Cable** Cable Type Impedance 48 in [121.92 cm] 0.36 lbs [163.29 g]

LL142 50 Ohms



## **Configuration:**

- TNC Male
- TNC Male
- LL142

## **Features:**

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation (Vop)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.35:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- 100% RF Tested
- Custom lengths available

## **Applications:**

- General Purpose
- Laboratory Use
- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Shield Layer 3 Jacket Material Jacket Diameter Solid Copper, Silver PTFE 3 Silver Plated Copper Tape Aluminum Polyester Silver Plated Copper Wire FEP, Green 0.195 in [4.95 mm]

Repeated Minimum Bend Radius

1 in [25.4 mm]

#### Connectors

Description	Connector	1	Connector 2	
Туре	TNC Male	:	TNC Male	
Specification	MIL-STD-34	48 1	MIL-STD-348, Figure 3	13-3
Impedance	50 Ohms		50 Ohms	
Contact Material & Plating	Beryllium Coppe	r, G <mark>old</mark>	Beryllium Copper, Gold	d
Contact Plating Spec.	ASTM-B488, 50µ	In. Min/	ASTM-B488, 50µ In. Minir	num
Dielectric Type	PEI		PEI	
Body Material & Plating	Passivated Stainle	ss Steel	Passivated Stainless Ste	eel
Body Plating Spec.	SAE-AMS-27	'01	SAE-AMS-2701	
Coupling Nut Material & Pla	iting Passivated Stainle	ss Steel	Passivated Stainless Ste	eel
Coupling Nut Plating Spec.	SAE-AMS-27	'01	SAE-AMS-2701	
Hex Size	9/16 Inch	1	9/16 Inch	

## **Environmental Specifications**

**Temperature** Operating Range

-55 to +125 deg C

**Compliance Certifications** (see product page for current document)

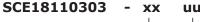
#### **Plotted and Other Data**

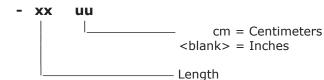
Notes:

Values at 25°C, sea level.

## How to Order

Part Number Configuration:





Example: SCE18110303-12 = 12 inches long cable SCE18110303-100cm = 100 cm long cable

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

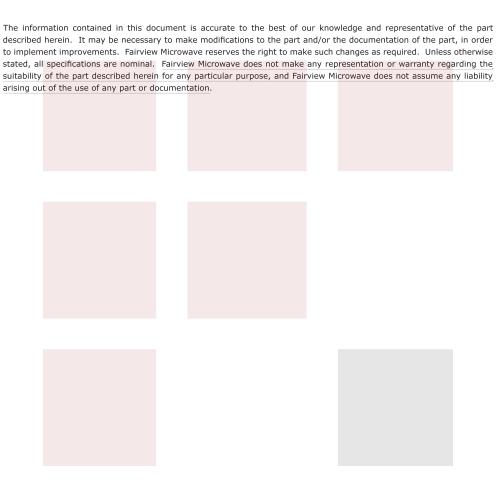


## SCE18110303-48 DATA SHEET

Low Loss TNC Male to TNC Male Cable LL142 Coax in 48 Inch with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

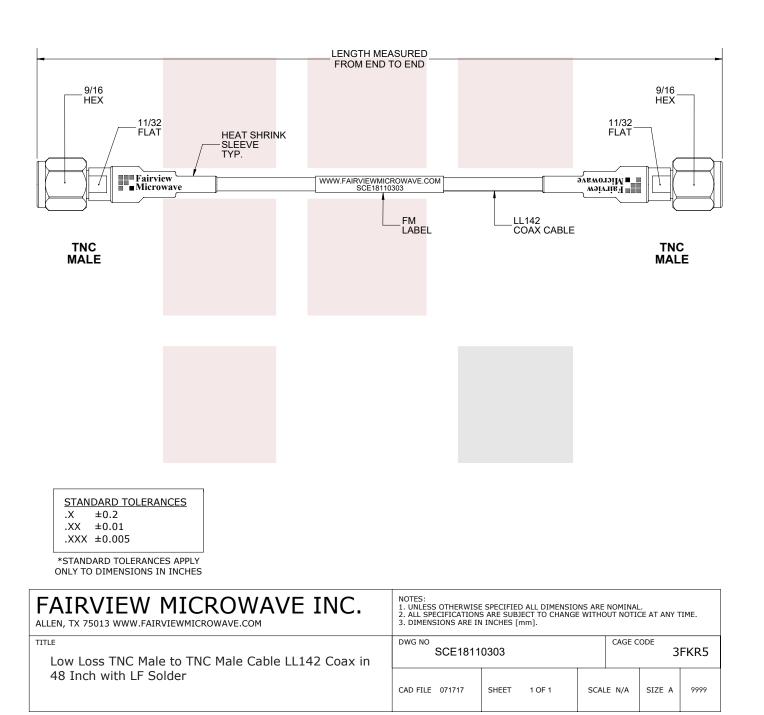
Click the following link to obtain additional part information: Low Loss TNC Male to TNC Male Cable LL142 Coax in 48 Inch with LF Solder SCE18110303-48

URL: https://www.fairviewmicrowave.com/low-loss-tnc-male-tnc-male-cable-II142-coax-sce18110303-48-p.aspx



301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689





SCE18110303-48 DATA SHEET

\*

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689